REMARKS/ARGUMENTS

Claims 1-63 are pending. The independent claims were rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu (US005883901A) in view of Burke (US006233235B1), further in view of Sawyer (US0067659251), and further still in view of Hillman (US006522265B1). To facilitate prosecution, independent claims 1, 23, and 28 have been amended. Claims 2, 4, 11-22, 24, 25, and 38-63 have been canceled. Claim 64 is new. Other claims have been amended to adjust dependencies.

Chiu describes a Signal Conversion System (SCS) connected to a cable modem. The Signal Conversion System (SCS) uses the Disable/Enable Cable Modem Request subframe type "to turn on and off a particular cable modem 113. The subframe type is 0x03 for Disable and 0x05 for Enable. The Disable/Enable CM subframe is a six-byte MAC modem address field that uniquely identifies the particular CM 113 the frame is directed to." (Col 12, Lines 45-51) The Examiner notes that "Chiu does not disclose disabling the cable modem for periodic intervals separated by activation windows."

Burke describes an alert system. "The alert phase 166 as provided in accordance with the alert queue 60, creates an alert time phase based on the group number N, and then sends the alert phase to the subscriber unit 16,18. A trap 168 is provided in connection with the CMTS operating logic in order to filter all messages destined for registered subscriber units 16, 18. The filtering operation provided by the trap 168 traps out telephony start/alert messages, and queues up such messages in the alert phase bins 0-127 of the alert queue 60. A master clock 170 is provided for the communication system 10 in order to provide precise timing intervals based on the wake times and the number of groups N, and thus master clock signals are generated using the alert messages" (column 8, line 64 – column 9, line 10)

Sawyer describes a technique for "maintaining state information for a network device changing from a first channel (in communication with a first base unit) to a second channel (in communication with a second base unit) communicates with at least one of the first base unit and an intermediate network device to ascertain the state information. Once the state information is ascertained, it is applied to the communication of the network device with the second base unit. Both the first and second base units are independently operable network devices in a data transmission network." (column 2, lines 46-55)

To facilitate prosecution, independent claims 1, 23, and 28 have been amended. Claim 64 is new. Claims 1, 23, 28, and 64 all recite "sending a configuration file to the cable modem, the configuration file including power-saving instructions included in vendor-specific extensions," "receiving a registration message from the cable modem, the registration message including an indication that the cable modem has power-saving capabilities," and "sending an acknowledgement to the cable modem to allow the cable modem to use power-saving capabilities." These amendments are supported in Figure 2 and associated description.

For example, "According to specific embodiments, a provisioning server 101 sends a configuration file through cable network headend 103 to a cable modem 109 at 201. The cable modem receives the configuration file specifying power-saving functionality at 202. More specifically, the configuration file specifics that the cable modem has the ability to disable and enable receiver circuitry. The power-saving functionality can be specified in vendor specific extensions in the configuration file. The cable modem then examines the vendor-specific instructions. If the cable modem does not understand the power-saving instructions, it ignores the power-saving provisions at 213. If the cable modem has power-saving capabilities and understands the vendor specific instructions at 203, the cable modem sends a registration message to the headend at 205. The headend analyzes the registration message at 207. In this analysis, if the cable network headend does not have the capability of disabling or enabling receiver circuitry of a cable modem, the cable network headend sends a not acknowledged (NACK) message back to the cable modem at 215. The cable modem will not use its power-saving capabilities. If the headend understands the power-saving provisions, the headend sends an ACK to the cable modem at 209. The cable modem can now use its power-saving provisions. The headend provisions the receiver disable and enable capability for the cable modem at 211. At this stage, the power-saving provisioning or the failure to provision is complete." (page 9, line 22 - page 10, line 16).

The independent claims have also been amended to recite "wherein the cable modem ignores all broadcast messages after receiving the first unicast SYNCH message." This recitation is supported throughout the specification. For example, "According to specific embodiments, a cable modem with disabled receiver circuitry can listen for only unicast SYNCH messages during the activation window. All broadcast system maintenance messages and broadcast SYNCH messages are ignored." (page 14, lines 22-25)

Furthermore, the independent claims recite transmitting a first "unicast SYNCH message with first vendor-specific extensions" and a second "unicast SYNCH message with second vendor-specific extensions." None of the references cited by the Examiner either alone or in combination are believed to sufficiently teach or suggest these recitations.

Dependent claim 3 also recites "wherein the unicast SYNCH message contains periodic interval and activation window information." Dependent claim 3 was rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu (US005883901A) in view of Burke (US006233235), further in view of Sawyer (US006765925), further still in view of Hillman (US006522265), and further still in view of Brusaw (US5523781). The Examiner notes that Chiu in view of Burke in view of Sawyer in view of Hillman do not teach or suggest a unicast SYNCH message

However, Brusaw also does not teach or suggest any unicast SYNCH message. The section the Examiner cites describes televisions that may be controlled using a command message. However, the command message is not a unicast SYNCH message. The command messages do not perform any SYNCH function and are not described as any unicast message. Furthermore, Brusaw applies to television sets controlled by a computer, which is again a distinct art area from cable modem networks. Consequently, dependent claim 3 is believed allowable.

In light of the above remarks relating to independent claims the remaining dependent claims are believed allowable for at least the reasons noted above. Applicants believe that all pending claims are allowable. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,
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